

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**LISTING OF CLAIMS:**

Claim 1 (currently amended): A DC-ADC converter, comprising:

- a transformer having a primary winding and at least one secondary winding;
- a semiconductor switching circuit ~~for allowing~~ arranged to allow electric current to flow from a DC power supply through ~~said the~~ primary winding in a first or a second direction;
- a current detection circuit ~~for detecting~~ arranged to detect the current flowing through a load connected to the secondary winding to output a current detection signal;
- a voltage detection circuit ~~for detecting~~ arranged to detect the voltage applied to ~~said the~~ load to output a voltage detection signal;
- a current-error signal generating circuit ~~for generating~~ arranged to generate a current-error signal based on ~~said the~~ current detection signal and a current reference signal;
- a voltage-error signal generating circuit ~~for generating~~ arranged to generate a voltage-error signal based on ~~said the~~ voltage detection signal and a voltage reference signal;
- a feedback signal formation circuit ~~for forming~~ arranged to provide a feedback signal in accordance with the magnitudes of ~~said the~~ current-error signal and voltage error signal; ~~and~~
- a switch drive circuit ~~for forming~~ arranged to provide a drive signal ~~for switching on and off that switches said the~~ semiconductor switching circuit on and off in accordance with ~~said the~~ feedback signal; and
- a feedback signal control circuit arranged to change the feedback signal to reduce the electric power supplied to the load when the DC power supply voltage of the DC power supply sharply rises; wherein

the feedback signal formation circuit includes:

- a current-error control transistor having a control input arranged to receive the

current-error detection signal; and

a voltage-error control transistor having a control input arranged to receive the voltage-error detection signal;

the voltage-error control transistor is connected in parallel with the current-error control transistor to output the feedback signal from a node where the voltage-error control transistor is connected in parallel with the current-error control transistor;

the feedback signal control circuit includes:

a sharp-voltage-change detection circuit arranged to receive the DC power supply voltage and arranged to generate a sharp-voltage-change signal by differentiating the DC power supply voltage, the sharp-voltage-change detection circuit including a capacitor and a first resistor; and

a reduction circuit including a transistor switch arranged to receive the sharp-voltage-change signal and a second resistor, the second resistor being connected in series between the transistor switch and the current-error control transistor and in series between the transistor switch and the voltage-error control transistor.

Claim 2 (currently amended): The DC-AC converter according to claim 1, further comprising:

a triangular wave signal generation circuit arranged to generate a triangular wave signal;  
wherein

~~said~~the switch drive circuit includes a PWM signal generation circuit ~~for generating~~  
arranged to generate a PWM signal by comparing the feedback signal with the triangular wave signal; upon receipt of ~~a~~the triangular wave signal from ~~said~~the triangular wave signal generation circuit and ~~said~~the feedback signal, ~~by comparing said triangular wave signal and feedback signal.~~

Claims 3-6 (Canceled).

Claim 7 (currently amended): A controller IC, ~~adapted~~ arranged to drive a semiconductor switching circuit ~~for flowing~~ arranged to direct current from a DC power supply through a primary winding of a transformer in a first or a second direction to supply AC power to a load connected to a secondary winding of ~~said~~ the transformer, ~~said~~ the controller IC comprising:

a feedback signal formation circuit ~~for forming~~ arranged to provide a feedback signal in accordance with the magnitudes of a current-error signal and a voltage-error signal, ~~said~~ the current-error signal generated based on both a current detection signal associated with the current flowing through ~~said~~ the load and a current reference signal, and ~~said~~ the voltage-error signal generated based on both a voltage detection signal associated with the voltage applied to ~~said~~ the load and a voltage reference signal; ~~and~~

a switch drive circuit ~~adapted to form~~ arranged to provide a drive signal ~~for switching to~~ switch on and off ~~said~~ the semiconductor switching circuit in accordance with ~~said~~ the feedback signal; and

a feedback signal control circuit arranged to change the feedback signal to reduce the electric power supplied to the load when the DC power supply voltage of the DC power supply sharply rises; wherein

the feedback signal formation circuit includes:

a current-error control transistor having a control input arranged to receive the current-error detection signal; and

a voltage-error control transistor having a control input arranged to receive the voltage-error detection signal;

the voltage-error control transistor is connected in parallel with the current-error control transistor to output the feedback signal from a node where the voltage-error control transistor is connected in parallel with the current-error control transistor;

the feedback signal control circuit includes:

a sharp-voltage-change detection circuit arranged to receive the DC power

supply voltage and arranged to generate a sharp-voltage-change signal by differentiating the DC power supply voltage, the sharp-voltage-change detection circuit including a capacitor and a first resistor; and

a reduction circuit including a transistor switch arranged to receive the sharp-voltage-change signal and a second resistor, the second resistor being connected in series between the transistor switch and the current-error control transistor and in series between the transistor switch and the voltage-error control transistor.

Claim 8 (currently amended): The controller IC according to claim 7, further comprising:  
a triangular wave signal generation circuit arranged to generate a triangular wave signal,  
wherein

~~said the~~ switch drive circuit includes a PWM signal generation circuit ~~for generating~~  
arranged to generate a PWM signal by comparing the feedback signal with the triangular wave signal, upon receipt of ~~said the~~ triangular wave signal from ~~said the~~ triangular wave signal generation circuit and ~~said the~~ feedback signal, ~~by comparing said triangular wave signal and feedback signal.~~

Claims 9-13 (canceled).

Claim 14 (currently amended): An electronic apparatus ~~equipped with~~ comprising:  
a battery;  
a DC-AC converter in accordance with claim 1 ~~for generating~~ arranged to generate AC power from the DC voltage of ~~said the~~ battery; and  
a light emitting apparatus arranged to be driven by ~~said the~~ AC power supplied from ~~said the~~ DC-AC converter.

Claim 15 (currently amended): The electronic apparatus according to claim 14, wherein

Application No. 10/596,823

May 21, 2009

Reply to the Office Action dated February 27, 2009

Page 7 of 18

~~said~~the light emitting apparatus ~~is~~ includes a CCFL.

Claim 16 (new): The DC-AC converter according to claim 1, wherein the second resistor is a variable resistor, and a voltage level to which the feedback signal is reduced is adjusted by varying the resistance of the variable resistor.

Claim 17 (new): The controller IC according to claim 7, wherein the second resistor is a variable resistor, and a voltage level to which the feedback signal is reduced is adjusted by varying the resistance of the variable resistor.